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December 18, 2007

Jane R. Summerson
M. Lee Bishop
Environmental Impact Statement Office
U.S. Department of Energy
Office of Civilian Radioactive Waste Management
1551 Hillshire Drive
Las Vegas, NV 89134

Re: Inyo County's comments on draft Repository Supplemental Environmental Impact Statement and draft Nevada Rail Corridor/Alignment Environmental Impact Statement

Dear Ms. Summerson and Mr. Bishop,

The County of Inyo, State of California, is an Affected Unit of Local Government under the Nuclear Waste Policy Act of 1987, as amended. Inyo County has prepared its response to the U.S. Department of Energy's (DOE) draft Repository Supplemental Environmental Impact Statement and draft Nevada Rail Corridor/Alignment Environmental Impact Statement.

The County has identified several issues regarding both documents that should be addressed by the DOE in the course of developing both Final Environmental Impact Statements (EIS). A supplement to the comment letter has also been attached and offers technical details of Inyo County's groundwater studies program, its main findings, and specific recommendations for the Final Repository Environmental Impact Statement.

Failure to Define the Affected Environment Correctly - Inadequate analysis in the draft Repository Supplemental Environmental Impact Statement relating to groundwater impacts to the Lower Carbonate Aquifer

The draft Repository Supplemental EIS (draft SEIS) gives an adequate description of individual groundwater basins, recharge sources, water uses, and major subterranean geologic characteristics. The SEIS also gives a brief summary of Inyo County's groundwater studies program, mentioning that a primary focus of the County "has been the investigation of the source of water that discharges from the various springs on the east side of Death Valley and whether there is a hydraulic connection between those springs and the groundwater moving beneath Yucca Mountain." The County has amassed a body of strong scientific evidence through geochemical analysis that the Lower Carbonate Aquifer (LCA), which underlies the repository, has several discharge points on the western side of the Funeral Mountains in the Furnace Creek area of Death Valley National Park (Park). The County also recognizes, as does the draft SEIS, that groundwater discharged in the Park is mixed with other groundwater sources from the Ash Meadows area and the Amargosa Desert.

Inadequate analysis relating to socio-economic impacts to Inyo County

The DOE considers Inyo County outside the "region of influence" for socio-economic impacts analysis under NEPA. Inyo County strenuously disagrees with this assertion, as the repository is approximately 15 miles from the Inyo County line and the boundary for Death Valley National Park. The Park has approximately 700,000 visitors a year, many of whom are foreign tourists. The County relies heavily on tourism revenues from the Park, as well as other regional attractions, such as the China Date Ranch, the Amargosa River, bird watching, and local mineral baths. The County is concerned about reduced tourism revenues, as well as decreases in real and business properties, from repository operations and the transportation of nuclear materials through the County. Therefore, Inyo County should be considered within the "region of influence" for socio-economic impacts analysis because of its proximity to the site. Without meaningful analysis in the 2002 Final EIS, and now the draft SEIS, the DOE's impact assessment of socio-economic impacts in Inyo County is incomplete and entirely inadequate because it fails to define the region of influence for the impacts created by the proposed action or due to reasonably foreseeable alternatives.

Inadequate analysis relating to reasonable alternatives to the Caliente Rail Corridor

The draft Rail EIS states that if the Caliente Rail Corridor is not completed, that the future course is "uncertain" with regards to transportation of nuclear materials to Yucca Mountain. Inyo County believes that if the Caliente Rail Corridor fails, truck transport will become the preferred method of transportation to the repository. Yet the draft Rail Corridor/Alignment EIS contains no analysis for a mostly truck shipping scenario, which should be considered a reasonable alternative, given the massive uncertainty surrounding the Caliente Rail Corridor. This will be the largest rail construction project in 80 years, and will cost \$2.5-\$3 billion dollars to complete the rail line. The Caliente Rail Corridor also faces several engineering challenges, as the route traverses seven north-south mountain ranges with steep grades, and numerous areas prone to flash flooding. The Caliente Rail Route will also impact grazing allotments by local ranchers, and require approximately 175 new groundwater wells to be drilled along the route to support construction. Given the uncertainty with cost, engineering challenges, and land-use conflicts, the prospects of the Caliente Rail Corridor being completed is highly questionable. Therefore, the DOE should be required to analyze a "mostly truck" shipping campaign as a reasonable alternative to the Caliente Rail Corridor.

Inadequate analysis of impacts relating to the movement of construction equipment and personnel on Highway 127 for the Caliente Rail Corridor

Finally, the draft Rail EIS gives no impact assessment of construction equipment and personnel traveling on Inyo County highways for construction of the portion of the Caliente Rail Corridor which parallels Nevada Highway 95, south from Tonopah, Nevada to the repository site. The County believes it is highly likely that the DOE will move construction equipment along California Highways 127 and 178 because of their close proximity to the Caliente Rail Corridor. This has the potential to increase the volume of traffic on these County highways and impact air quality, yet the draft Rail Alignment/Construction EIS makes no such prediction or assessment of potential impacts. The DOE should analyze the impacts of increased traffic volumes to Inyo County on Highways 127 and 178 in the Final Rail EIS.

Transportation, Aging, and Disposal Canister

The Transportation, Aging, and Disposal (TAD) canister is a multi-purpose canister designed to simplify the transport process and reduce exposure to highly radioactive spent fuel rods. The TAD utilizes one packaging system for spent fuel when it leaves the reactor site.

Use of the TAD canister system will significantly increase workers' radiological exposure and the risks associated with handling bare spent fuel assemblies, and loading and welding canisters at reactor sites. There also are uncertainties regarding acceptance of the TAD canisters at the repository and the potential return of rejected TADS to originating sites. The Final SEIS should thoroughly assess the risks

SIFPD has received limited training to respond to a nuclear release through the DOE's Training Emergency Preparedness Program (TEPP). It is anticipated that the SIFPD would need numerous full-time, paid employees, in addition to its current volunteer staff, if a shipping campaign to Yucca Mountain is initiated. In addition, the SIFPD would need specialized equipment and detection devices, along with a rigorous training plan to adequately deal with a release of radionuclides in Southeast Inyo County.

The nearest major hospital facilities are in Las Vegas or Barstow, depending on the site of the incident. It is unclear whether these facilities are properly equipped or trained to handle persons who have been exposed to radioactive materials. Travel times to these facilities range from one and a half to three hours away from potential truck shipping routes in Inyo County. Currently, there is no regional communication network that could alert residents and visitors to a radioactive release.

The DOE maintains that these routes are currently not under consideration as truck transport routes. However, due to lingering uncertainties regarding the TAD canister, the Caliente Rail Corridor, and Clark County's steadfast opposition to nuclear shipments through Las Vegas, truck transport appears to be the most probable method of transporting nuclear materials to Yucca Mountain. This belief is further strengthened by the fact that the DOE currently uses State Highway 127 and 178 for low-level waste transport to and from the Nevada Test Site.

The County believes that Section 180 (c) of the Nuclear Waste Policy Act, which provides grants to affected states and tribes for response training, is ineffective both in funding and scope, to adequately train emergency responders to deal with a nuclear release. Modeling indicates that the State of California will only receive approximately \$200,000 to distribute to the hundreds of local jurisdictions and first responder agencies.

Other Transportation Issues

The Draft SEIS does not consider "worst-case" accidents in its NEPA analysis because such combinations of factors were considered "not reasonably foreseeable." Yet, the Draft SEIS acknowledges that clean-up costs after a very severe transportation incident involving a repository shipment resulting in the release of radioactive material could range from \$300,000 to \$10 billion. The Final SEIS should evaluate the impacts from a credible worst-case transportation accident or terrorist attack, as well as other accidents scenarios caused by human error.

A National Academy of Sciences (NAS) study recommended that detailed surveys of transportation routes for spent fuel be done to identify potential hazards that could lead to or exacerbate extreme accidents involving very long duration, fully engulfing fires and that steps should be taken to avoid or mitigate such hazards. The Final SEIS should identify the shipping corridors and include route-specific analyses that identify potential hazards along shipment routes. The risk analyses should include the potential consequences of a severe accident or terrorist attack involving extreme, long duration fire conditions that exceed package performance requirements. The Final SEIS should also consider the impact of human error as well as the potential for unique local conditions to exacerbate the

consequences of accidents or terrorist attacks. Certain segments of possible routes in California could provide conditions in which an accident or terrorist attack could exceed the spent fuel packaging performance requirements. Two major highway accidents that occurred this year on California highways (one in the Bay Area and one in Santa Clarita tunnel fire) are being investigated to determine whether these accidents may have resulted in conditions, in particular fire temperatures and fire durations, which approached or exceeded packaging performance requirements. Similarly nearly half of the 16 historical severe accident scenarios that were examined in the NAS 2006 study on spent fuel transport safety occurred in California. The Final SEIS should examine credible accident scenarios that could exceed packaging performance standards.

Thank you for the opportunity to comment on the draft Repository SEIS and the draft Rail EIS. Inyo County believes that its comments will allow the DOE to make the most informed decision regarding impacts to Inyo County, the severity of such impacts, and appropriate mitigation measures.

Please contact Matt Gaffney, Project Coordinator, Yucca Mountain Repository Assessment Office, at (760)-873-7423 if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Jim Bilyeu", is written over the printed name.

Supervisor Jim Bilyeu, Chairperson
Inyo County Board of Supervisors